

WHAT IS CLAIMED IS:

1. A system comprising:

- a separation pathway having a first end and a second end;
- a sample well in communication with the first end;
- one or more collection wells, wherein the second end is adapted to communicate with at least one collection well of the one or more collection wells;
- a power supply having a first electrode and a second electrode adapted to create an electric field between the first end and the second end;
- a first actuator adapted to adjust a first position of the second end relative to the plurality of collection wells; and
- a controller coupled to the first actuator and adapted to modulate a potential between the first end and the second end and adapted to control the first position.

2. The system of claim 1 further comprising a detector in communication with the second end.

3. The system of claim 2 wherein the detector includes a fluorescent detector, an ultraviolet-visible (UV-VIS) detector, a mass spectrometry detector, an immunoassay detector, an electrochemical detector, a radiochemical detector, a nuclear magnetic resonance (NMR) detector or a surface plasmon resonance (SPR) detector.

4. The system of claim 1 wherein the first electrode is coupled to the first end.

5. The system of claim 1 wherein the first electrode is coupled to the sample well.

6. The system of claim 1 wherein the second electrode is coupled to the second end.

7. The system of claim 1 wherein the second electrode is coupled to the one or more collection wells.

8. The system of claim 1 wherein the separation pathway includes a capillary or microchannel.

9. The system of claim 1 wherein the actuator includes a motor coupled to the plurality of collection wells.

10. The system of claim 1 wherein the first actuator includes a first motor adapted to displace the plurality of collection wells along a first axis and a second motor adapted to displace the plurality of collection wells along a second axis.

11. The system of claim 1 wherein the first actuator includes a motor coupled to the second end.

12. The system of claim 1 wherein the first actuator includes a first motor adapted to displace the second end along a first axis and a second motor adapted to displace the second end along a second axis.

13. The system of claim 1 wherein the controller includes a processor.

14. The system of claim 1 further including:

a plurality of sample wells wherein the sample well in communication with the first end includes a selected sample well of the plurality of sample wells;

a second actuator adapted to adjust a second position of the first end relative to the plurality of sample wells; and

wherein the controller is adapted to control the second position.

15. The system of claim 1 wherein the second actuator includes a motor coupled to the plurality of sample wells.
16. The system of claim 1 wherein the second actuator includes a third motor adapted to displace the plurality of sample wells along a first axis and a fourth motor adapted to displace the plurality of sample wells along a second axis.
17. The system of claim 1 wherein the second actuator includes a motor coupled to the first end.
18. The system of claim 1 wherein the second actuator includes a third motor adapted to displace the first end along a first axis and a fourth motor adapted to displace the first end along a second axis.
19. The system of claim 1 wherein the controller includes a clock.
20. The system of claim 1 wherein the controller includes a voltage controller coupled to the power supply.
21. A computer implemented method comprising:  
applying a sample to an input of a separation pathway;  
generating a migratory field in the separation pathway;  
eluting an analyte of the sample from the separation pathway;  
collecting the analyte in a collection well;  
interrupting the migratory field after collecting commences; and  
repeating the collecting and the interrupting, at a predetermined time interval,  
for a successive analyte and a successive collection well.
22. The method of claim 21 wherein repeating the collecting and interrupting, at the

predetermined time interval includes repeating the collecting and interrupting, at substantially uniformly spaced time intervals.

23. The method of claim 21 further comprising synchronizing the collecting and interrupting with the mobility of the analyte.

24. The method of claim 21 further comprising analyzing the analyte prior to collecting.

25. The method of claim 21 wherein injecting the sample includes injecting a biological sample.

26. The method of claim 21 wherein injecting a sample includes injecting a mixture of proteins, macromolecules, nucleotides, carbohydrates, enantiomers, small molecule libraries or natural compounds.

27. The method of claim 21 wherein creating a migratory field includes applying a potential to the separation pathway.

28. The method of claim 21 wherein creating a migratory field includes applying a pressure to the separation pathway.

29. The method of claim 21 wherein creating a migratory field includes drawing a vacuum in the separation pathway.

30. The method of claim 21 wherein collecting includes positioning the separation pathway relative to the collection well.

31. The method of claim 21 wherein repeatedly interrupting the migratory field

includes adjusting a potential within the separation pathway.

32. The method of claim 21 further comprising establishing the predetermined time interval as a function of a composition of the separation pathway.

33. A system comprising:

a plurality of separation pathways, each separation pathway having a first end and a second end;

a plurality of sample wells, wherein each sample well is in communication with a first end of a separation pathway;

a power supply having a first electrode and a second electrode adapted to create an electric field between the first end and the second end of each separation pathway;

for each separation pathway, a plurality of collection wells wherein each collection well is adapted to communicate with a second end of the separation pathway;

for each separation pathway, a first actuator adapted to adjust a position of the second end relative to the plurality of collection wells; and

a controller coupled to the first actuator and adapted to modulate the electric field and adapted to control the position.

34. The system of claim 33 further comprising a detector coupled to each separation pathway of the plurality of separation pathways.

35. The system of claim 33 further comprising a detector coupled to each collection well of the plurality of collection wells.

36. The system of claim 33 wherein the plurality of separation pathways includes a multichannel capillary.

37. The system of claim 33 wherein the plurality of separation pathways includes a

plurality of microchannel pathways.

38. The system of claim 33 wherein the plurality of separation pathways includes a plurality of nanochannel pathways.

39. The system of claim 33 wherein the plurality of sample wells includes a multi-well plate.

40. The system of claim 33 wherein the plurality of collection wells includes a multi-well plate.

41. The system of claim 33 further comprising a frame wherein each of the plurality of collection wells for each separation pathway is secured to the frame.

42. The system of claim 40 wherein the first actuator is coupled to the frame.

43. The system of claim 33 wherein the first actuator is coupled to the plurality of separation pathways.

44. The system of claim 33 wherein the first actuator is coupled to the plurality of collection wells.